Gross Revenue-related costs ("ACF_{GR}"), *e.g.*, uncollectibles and regulatory assessments to develop TELRIC rates.

In the case of expense-to-investment ACFs, expenses that are incurred for specific plant accounts are directly attributed only to those investments, while expenses that are not specific to plant accounts are spread equally across all affected investments. This approach ensures that the expenses for each network element are driven to the greatest extent possible on a cost-causative basis, and non-specific costs are attributed in reasonable proportions.

In the case of expense-to-expense ACFs, the ACF expenses are spread equally over all relevant expenses, ensuring that each ACF expense will be driven to the greatest extent possible to the products/services/elements on a cost-causative basis.

Finally, in the case of the expense-to-revenue ACF, all recurring and non-recurring studies bear the relevant uncollectible revenues and regulatory assessments because these items are directly linked to the level of revenue generated.

Q. How are the ACFs used to convert the incremental investment costs of UNEs into annual UNE costs that are used for rates?

A. The incremental total installed investment for a UNE, which has been developed through the processes that have already been discussed, is first multiplied by the relevant $ACFs_{EI}$. The resulting amount is then multiplied by the ACF_{COH} and the ACF_{GR} to arrive at a UNE Annual Recurring Cost. When appropriate, the UNE Annual Cost is divided by twelve to establish monthly recurring UNE rates.

Q. What costs are captured in the calculation of the ACFs?

A. The costs identified by the ACF_{EI} include the capital- and investment-related costs (*i.e.*, depreciation, rate of return, federal income tax and property and other taxes), and the operations costs (*i.e.*, network, and certain administrative and support functions) that can be ascribed to purchasing and operating a UNE investment. These costs reflected in the ACF_{EI} are incurred as a result of acquiring the UNE investment and placing it into service for the CLEC. In addition, the Company has identified the factors to reflect common overhead (*i.e.*, ACF_{COH} that identifies expenses associated with certain general administrative activities, such as, executive, legal, and human resources, and gross revenue-related costs (*i.e.*, ACF_{GR} that allocates uncollectibles and regulatory assessments).

Q. How does the methodology used in the development of the ACFs compare to the methodologies used in the Consolidated Arbitrations?

A. The methodology used for developing the ACFs for UNE recurring charges is consistent with the methodologies used in the Consolidated Arbitrations to convert investments into annual costs. Briefly, as with the Carrying Charge Factor ("CCF") approach previously used, the ACFs are generally ratios of plant account-related expenses to plant account investments. The ACF components for depreciation expense, return, interest and taxes, property and other taxes, network, marketing and other support are developed in essentially the same manner as their CCF equivalents and applied in the same way. Certain ACF names have changed in order to ensure consistency in terminology used across the Verizon footprint. The Gross Revenue Loading ACF is also developed and applied in essentially the same fashion as its CCF counterpart. The only ACF that is calculated on a different basis is the factor used to identify common overhead. As a CCF, this factor was applied to investment to identify an assignment of overhead expense; as an ACF it is applied to expense, and it identifies overhead expense.

In addition, the ACF methodology in this filing, unlike the method used in previous filings, explicitly reflects inflation, productivity, and other adjustments designed to ensure that the ACFs are forward-looking.

Q. Why is it more appropriate to develop the ACF_{COH} on an expense basis rather than on an investment basis?

A. All products, services and elements utilize to some extent Company resources (*i.e.*, Company facilities and equipment, Company labor such as installation and maintenance forces, etc.). As such, all products, services and elements should pick up a share of overhead costs. Since some products (most significantly non-recurring charges) do not contain investments, applying an ACF_{COH} developed on an investment basis would result in those products necessarily *not* picking up their appropriate shares of overhead costs. Developing the ACF_{COH} on an expense basis and applying that factor to all expenses yields a more equitable, cost-causative result that ensures that all products, services, and elements will pick up their appropriate shares of overhead costs.

Q. Please describe the data sources used to develop the ACFs.

A. The ACFs developed in this proceeding and the CCFs filed in the Consolidated Arbitrations use the same basic data sources. That is, the Network ACFs in both cases are Verizon MA specific, derived from relationships between expenses in the Company's financial system, and the investments related to those expenses. However, in this case, the Company has determined that the customer interfacing portion of the Wholesale Marketing ACF and the Common Overhead ACF should be based upon the expenses incurred across the Verizon footprint. The organizations that support these functions have undergone consolidations within Verizon. As a result, the expenses and investments, and the affected ACFs, now reflect the regionalization of the costs they were designed to identify (*i.e.*, the ACF for Common Overhead is based on the ratio of total Common Overhead expense divided by Total Operating expense less the Common Overhead expense). Applying a Common Overhead factor, developed in such a manner, to the element and activity sub-expenses of a particular jurisdiction, will assign the appropriate portion of Common Overhead allocable to that jurisdiction and no more.

Q. What are the ACFs used by the Company in this filing?

A. The following forward-looking ACFs were developed for this filing:

1) Depreciation, Return, Interest and Federal Income Taxes ACFs;
2) Property and Other Taxes ACFs;
3) Network ACFs;
4) Wholesale Marketing ACF;
5) Other Support ACF;
6) Common Overhead ACF;
7) Gross Revenue Loading ACF, and
8) Right to Use (RTU) ACF.

2. Depreciation, Return, Interest, and Federal income Tax ACFs

Q. What depreciation parameters were used in calculating these ACFs?

A. Verizon MA's calculation of depreciation reflects the forward-looking depreciation lives and net salvage values presented in Mr. Sovereign's testimony filed separately in this proceeding.

Q. What cost of capital was used in the studies presented in this proceeding?

A. The studies reflect the use of a 12.6 percent cost of capital. As shown by the testimony of Dr. Vander Weide, the use of this cost of capital is conservative and serves to understate Verizon MA's forward-looking cost of capital.

Q. How were the Depreciation, Return, Interest and Federal Income Tax ACFs calculated in the TELRIC studies presented here?

A. The forward-looking depreciation lives were used as inputs to VCost, which calculated for each year of the plant asset's life the book depreciation and tax depreciation as well as the associated return, interest and federal income tax requirements. These results were then levelized over the life of the asset.

Q. How else is the cost of capital used in the Company's studies?

A. Besides being used in determining the return, interest and federal income tax components associated with plant investments, this cost of capital is employed in the various levelizing algorithms used throughout the Company's cost studies.

3. Property Tax and Other Tax ACFs

Q. What is included in the Property Tax and Other Tax ACFs and how is it accounted for in the TELRIC studies presented here?

A. Taxes included in these ACFs include special franchise taxes, property taxes on the taxable plant, and other miscellaneous taxes imposed upon the Company by the various taxing authorities (*e.g.*, municipalities and counties) in the state. The ACF is based on the assignment of the tax expense to the class of plant that is being taxed.

4. Network ACF

Q. What types of expenses are in the Network ACF?

A. The Network ACF includes repair expenses, rearrangement expenses, testing expenses, testing equipment capital costs (*i.e.*, depreciation, return, interest and federal income tax on the equipment used for testing), plant or equipment specific loadings and general network loadings.

Q. Please describe the methodology that the Company employed to develop the Network ACF.

A. The starting point for the Network ACF is the set of expenses that have been incurred in 1999 for repairing and rearranging our plant and equipment. It includes the cost associated with responding to subscriber trouble reports ("R" Dollars), as well as the cost associated with moves, changes, rearrangements and upgrades to the Company's network ("M" dollars). These expenses, which are captured by plant account, are divided by the investments in the associated plant accounts to calculate the base Network ACF for each plant account. The Network ACF also includes costs associated with testing and plant account loadings. The Network ACF also reflects an adjustment for non-recurring revenue since some network expenses are also being recovered through non-recurring charges.

Q. Did you adjust the 1999 base-year network expenses in the calculation of the ACFs?

A. Yes. For copper outside plant facilities, newly placed cables would be expected to experience fewer troubles related to equipment/facility deterioration versus the plant that is currently in place. In order to reflect this potential reduction in subscriber troubles due to newly placed copper plant, Verizon MA has adjusted the forward–looking assessment of "R" dollars downward by 5 percent for copper cables and drop wire.

The Company did not adjust the "M" dollars because these reconfiguration dollars reflect moves, changes and upgrades that are done on an as required basis, independent of technology or age of plant; *i.e.*, even if the Company has in place an optimally designed network, it will still be required to reconfigure its facilities to reflect new municipal ordinances and movement of customers.

Q. How did the Company treat the costs related to testing expenses in the Network ACFs?

A. It is assumed that a purchaser of network elements will perform its own subscriber trouble testing. Therefore, the expenses associated with the testing activity associated with subscriber trouble reports have been removed from the overall testing expense. In addition, an adjustment was made to remove testing expenses that are for non-regulated services. The remaining testing expenses are spread over the appropriate investment accounts. In addition, the circuit investments associated with the testing equipment needed to test the network have been identified. The circuit capital cost factors are applied to these investments to estimate the annual costs associated with this testing equipment. Similar to the reductions made in the testing expenses, reductions are made to the capital costs of the equipment to reflect an allocation of the equipment to subscriber trouble testing and to reflect non-regulated activities. The resulting amounts of testing expense and capital costs of testing equipment are then combined to derive the basis of the forward-looking estimate of testing that will be required for unbundled network elements. This estimation is then added to the Network ACFs.

Q. Please discuss what plant account loadings are also added to the Network ACFs.

A. There are two additional loadings for the Network ACFs. The first loading is specific to either outside plant or central office investments. This central office or outside plant loading identifies those expenses that can be directly assigned to either segment (central office or outside plant) of the asset accounts, but not to specific plant accounts within the segment. For example, central office engineering expense is added to the Network ACF for all central office plant accounts (*i.e.*, switching and circuit investments). The second loading, the general loading, identifies those network expenses that cannot be assigned to only outside plant or only central office accounts. For example, provisioning and material management expenses are included as a general loading, not as a specific outside plant or central office loading.

Q You stated that non-recurring revenues were subtracted from the Network ACF. Why is it appropriate to subtract out non-recurring revenues?

A. By subtracting non-recurring revenues from the Network ACFs, the Network ACFs reflect only the expenses associated with recurring activities. Thus they represent the appropriate starting points for estimating the recurring costs of the UNEs presented in this case, and the possibility of recovering the same expense in both a recurring rate and a non-recurring rate is eliminated.

Q. How do the Network ACFs in this proceeding adjust for the non-recurring revenues?

A. The Company examined all of the 1999 regulated non-recurring revenue by a functional or product classification. Non-regulated revenues are excluded, since the expenses associated with those non-recurring activities are not included in the Network ACFs. From this classification, the non-recurring revenue was categorized as either provisioning-related (*e.g.*, field installation, central office wiring, etc.) or customer interfacing (*e.g.*, service ordering or service restoral). In those instances where the classification could not be used to firmly distinguish between provisioning or customer interfacing, the revenue was split 50 percent into each category. All of the provisioning non-recurring revenue was subtracted from the Network ACF, while the customer interfacing non-recurring revenue was subtracted from the wholesale marketing ACF, as will be discussed elsewhere in this testimony. Although it is not possible to directly associate the tariff rates or revenue to their respective cost components (in that many of the retail rates have been in effect for long periods of time) allocating these revenues to their respective functions, *i.e.*, provisioning and customer interfacing, ensures that the necessary offset or credit is being given to the appropriate ACF components and guarantees that there is no possibility of double recovery of these expenses.

Q. Why was it appropriate to subtract the provisioning non-recurring revenue from the Network ACF?

A. The Company wanted to explicitly reduce the network expenses to reflect its best estimate of all of the network provisioning expenses that are associated with non-recurring activities. The provisioning non-recurring revenues received were used as the Company's best approximation of such expenses. This was done since provisioning non-recurring revenues recover the costs of activities that are captured by the expense accounts contained within the Network ACFs.

Q. Did the Company also adjust the Network ACFs to reflect the receipt by the Company of pole and conduit rental and/or attachment fees?

A. Yes, the Company specifically adjusted both the "M" and "R" dollars of the pole and conduit expense accounts to reflect the rentals and fees collected by the Company, thereby avoiding any double recovery of structure costs. Here too, the revenues were from the 1999 Company data, to reflect our best estimate of future structure revenues. This way, only the structure costs utilized by Verizon MA are reflected in the Network ACFs and not the structure costs that are supporting other companies' plant.

5. Wholesale Marketing ACF

Q. What does the Wholesale Marketing ACF represent?

A. The Wholesale Marketing ACF represents the expenses associated with product management, advertising and customer interfacing functions associated with the wholesale market.

Q. How did the Company develop the Wholesale Marketing ACF?

A. The wholesale marketing factor includes the wholesale marketing expenses and wholesale customer care expenses that will be incurred in a forward-looking wholesale environment divided by revenue-producing only investments. How Verizon MA divided investments into revenue producing and non-revenue producing is described later. Only revenue-producing investments are used since support investments (*i.e.*, *non*-revenue producing investments such as motor vehicles) are not included as investments in any of the UNE recurring studies. Because only revenue-producing investments are included in the UNE studies, the factor development must be done in a consistent manner.

Q. Specifically, how were the wholesale marketing expenses treated?

A. The wholesale marketing expenses were based upon the 1999 Verizon-East regional expenditures adjusted by avoided retail costs. The adjustment for retail avoided costs was based on the avoided cost study methodology presented by Mr. Minion in Part B of this proceeding. The investments were based upon the 1999 revenue-producing only investments.

Q. Specifically, how were the customer care expenses treated?

A. The customer care expenses and investments were aggregated on a Verizon-East regional basis. Retail expenses are excluded, again based on Verizon MA's avoided cost methodology in Part B, and only those expenses associated with the wholesale "customer care" function are captured in this ACF.

6. Other Support ACF

Q. How was the Other Support ACF developed?

A. The Other Support ACF includes support expenses in information management, research and development, procurement and expenses and the capital requirements associated with non-revenue producing investments in motor vehicles, special work equipment, land and buildings (excluding central office buildings), general purpose computers, furniture, and official communications and support equipment. The other support costs are incurred in support of all classes of plant and are attributed to all revenue-producing investment categories. The factor is developed on the basis of Verizon-East regional costs and investments.

Q. What are non-revenue producing investments and how are they determined?

A. All of the assets of the Company can be categorized either as revenue-producing (*i.e.*, associated with products, services or elements for which the Company earns revenue) or non-revenue producing (*i.e.*, support investments not associated with any revenue-generating products, services or elements). Certain items are taken as 100 percent non-revenue producing, such as official communications equipment, vehicles, furniture, and garage and work equipment. In the case of General Purpose computers, the Service

Costs organization identified products for which computers are an integral part of the service. Finally, in the case of Land and Buildings, all investments in central office equipment buildings are considered revenue-producing, and they are identified as part of the costs of other products, services or elements. The remainder of land and building investments (*i.e.*, other than buildings housing central office equipment) are considered support investments.

Q. What other adjustments are made to the Other Support costs in the development of the ACF?

A. As discussed elsewhere, the Company also excludes the retail avoidable costs to identify wholesale-only other support costs. Furthermore, the Company also subtracts an estimation of costs that are associated with access to OSS. Costs associated with access to OSS are further discussed in Mr. Minion's testimony.

7. Common Overhead ACF

Q. What is included in the Common Overhead ACF?

A. The Common Overhead ACF includes common overhead expenses.

Q. What is included in common overhead expenses?

A. Common overhead expenses are composed of expenses that had previously been described as General and Administration ("G&A")

functions. These expenses include the Executive, Planning, General Accounting and Finance, External Relations and Human Resources, Legal, and Other G&A. The Company, in this proceeding, has modified its methodology used in developing the Common Overhead ACF in two ways. In previous Company filings the G&A expenses were related to total company investments. Verizon MA has concluded, however, that it would be more appropriate to express and recover these expenses as a relationship to total Company expenses (not including the common expenses). This more closely assigns the expenses to all categories of services, products and elements. In this manner, all charges, including non-recurring charges, pick up a share of these overhead organizations, rather than only recurring rates bearing the responsibility for carrying these overhead organizations. This is appropriate because overhead expenses, for example, in Human Resources bear a relationship to the number of employees in the Company. Since employees in the installation forces are dedicated to non-recurring activities, it would be appropriate that the non-recurring rates that reflect recovery of these employees' costs bear their fair share of Human Resources and the other common overhead expenses. Secondly, these overhead expenses were aggregated on a Verizon-wide basis. This more accurately reflects the consolidated operations of a multi-state business organization, for these overhead functions.

Q. What adjustments were made to the common overhead expenses?

A. As with other ACFs, the common overhead expenses were reduced by a Resale Avoided Cost Discount percentage.

8. Gross Revenue Loading ACF

Q. What is the Gross Revenue Loading ACF?

A. Gross Revenue Loading ("GRL") is a factor that is applied against the Company revenue to account for regulatory assessments and uncollectibles. Both of these expenses are associated with the level of revenues that the Company actually receives.

9. Right to Use (RTU) ACF

Q. How were software costs (RTU fees) treated in this study?

A. All software RTU fees were capitalized, based on recent changes in accounting rules.

Q. Please explain the recent accounting changes concerning the classification of software costs.

A. On March 4, 1998, the American Institute of Certified Public Accountants ("AICPA") issued SOP 98-1, which recommended changes in the requirements for capitalization of software. As a result, effective January 1, 1999, the vast majority of software used for operating systems and applications in Verizon MA's network has been capitalized. In Verizon MA's accounting system, the software is capitalized in the Intangible Asset Account 2690.

Q. How will this accounting change affect Verizon MA's cost studies?

A Previously, only a portion of Verizon MA's software costs were capitalized; for example, the RTU fees associated with the initial purchase of the switch, and certain software that added new functionality to an existing switch. All other RTU costs associated with adding software to an existing switch were treated as an expense. With SOP 98-1, *all* switch software costs will be capitalized and booked to the Intangible Asset Account 2690.

Q. How has Verizon MA captured the capitalized RTU costs in its TELRIC studies?

A. Verizon MA has developed a RTU ACF. This ACF is based on a ratio of Annual RTU software costs and total investment associated with either switching or digital circuit equipment. The RTU ACF is applied to the appropriate investments throughout the study. A more detailed explanation of the application of this factor as it pertains to switching investments can be found in the switching section of this testimony.

10. Generic Adjustments to Annual Cost Factors

Q. What generic adjustments are made to the Network, Wholesale Marketing, Wholesale Other Support, and Common Overhead ACFs?

A. There are three types of adjustments that are made generically: avoidance of retail-related costs, inflation/productivity considerations and a forward-looking to current conversion.

Q. The TELRIC ACFs reflect only wholesale costs. How did you adjust for retail-related costs?

A. As mentioned earlier, retail-related costs have been excluded based on the retail avoided cost methodology submitted by Mr. Minion in Part B of this proceeding.

Q. How has Verizon MA adjusted the ACFs for inflation and productivity considerations?

A. As described earlier, ACFs have been developed using expenses for calendar year 1999. In order to project these expenses into the future, Verizon MA has included as inputs to the VCost system, estimates of Labor Inflation (Labor Cost Index), general inflation (Consumer Price Index) and productivity for each of the next three years (2001-2003). VCost uses these inputs to develop levelized ACFs, which are then applied to the forward-looking TELRIC investments. The Common Overhead and GRL ACFs are not adjusted in this manner, since these factors are multiplied against costs resulting from the application of adjusted network, marketing, and support factors, and they will follow accordingly.

Q. Can the ACFs developed up to this point be used to identify forward-looking TELRIC costs?

A. No. Before the ACFs can be used to identify forward-looking costs they must be adjusted by a Forward-Looking Conversion ("FLC") factor.

Q. Why is it appropriate to employ a FLC factor?

A. The use of ACFs based on a current expense-to-investment relationship understates the identification of forward-looking costs. To this point, the use of ACFs by the Company to reflect the expense of providing UNEs results in purchasers of UNEs realizing expense savings that have not been identified or ascribed to any particular actual cost-cutting initiative of the Company. This is due to the fact that the use of the TELRIC construct generally results in reduced levels of investment and expenses. This reduction of investment and expenses, given the relationship between investment and expense reflected in the ACFs, causes an artificial reduction in expenses.

In the past, the CCFs were computed on the basis of current expense-to-investment ratios that provided a relationship used against cost study-related investments that were unlikely to change dramatically from those used to develop the factors. The CCFs provided a means by which to identify reasonable estimates of expense. However, when ACFs developed in this manner are applied to a significantly smaller or larger investment base, the result is an estimate of operating expenses that falls considerably below or above current levels. In the present situation, if the expense numerators in the ACF ratios are made forward-looking through the use of productivity factors, technology-related efficiencies, and other projected savings, the reductions in estimated expenses represent highly aggressive cost-reduction goals that are highly unlikely to be achieved or achievable. For example, there is no reason to believe that the replacement of one loop technology by an alternative technology with a 10 percent lower investment per loop would reduce the Company's legal or executive expenses at all, much less by 10 percent. Furthermore, it is unlikely that reflecting aggressive discounts in material prices of equipment will subsequently produce concomitant reductions of like magnitude in the maintenance and administration of the equipment. In order to avoid a gross under-identification of cost, some of the factors used to identify carrying costs must be adjusted to ensure the proper identification of costs. Looked at another way, since Verizon MA has made adjustments to the expense levels in the numerator of the ACF development, an imbalance occurs in the ACF ratio if a similar forward looking adjustment is not made in the ACF denominator. The FLC Factor accomplishes this by making the ACF truly forward looking and appropriately applicable to the forward looking incremental investments developed for the UNE products and services. A further demonstration of the need of this kind of adjustment is illustrated below.

Application of a Forward-Looking Conversion ("FLC") Factor				
Line	Item	Source	Amount	Comments
1	Forward-Looking Expense		$300	Estimate of True Forward-Looking Expense
2	Current Investment		$1,000	Investment denominator of ACF ratio
3	Annual Cost Factor (ACF)	L1 / L2	.3000	Calculated ACF
4	TELRIC Investment		$800	Forward-Looking Investment

5	Purported TELRIC Expense	L4 x L3	$240	Pseudo – "Forward-Looking" Expense
6	Shortfall	L1 – L5	$60	Unidentified True Forward-Looking expense

Q. To which ACFs should the Forward-Looking Conversion Factor apply?

A. The capital-related components (*i.e.*, Depreciation, RIT, and Property and Other Taxes) should not be adjusted because their associated carrying costs are directly caused by the level of investment identified. Likewise, the Gross Revenue Loading factor does not need to be adjusted because the Gross Revenue Loading identifies costs directly linked to the overall level of expense identified. However, the other components (*i.e.*, Network, Wholesale Marketing, Other Support, and Common Overhead) are associated with expense levels that are not explicitly caused by the value of the investment. That is, it would probably cost the Company the same level of network-related expense to maintain or administer the same piece of equipment whether it costs $10,000 or $6,000. The Marketing effort to support a wholesale offering is independent of how much equipment material prices fluctuate. Finally, Common Overhead expense may vary with the level of business volume but is probably